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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/576,516

05/23/2000

Xin Qiu

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43471 7590 04/20/2007

GENERAL INSTRUMENT CORPORATION DBA THE CONNECTED
HOME SOLUTIONS BUSINESS OF MOTOROLA, INC.
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HORSHAM, PA 19044

EXAMINER

PYZOCHA, MICHAEL J

ART UNIT

PAPER NUMBER

2137

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/576,516

Applicant(s)

QIU ET AL.

Examiner

Michael Pyzocha

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. Claims 1-20 are pending.

2. In view of the appeal brief filed on 01/26/2007, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grube et al. (US 5602916) in view of Hannah et al. (US 5930361).

As per claims 1 and 20, Grube et al. discloses a method of providing varying levels of security in a data processing system (see fig. 4, sheet 3, col. 2, lines 39-57), receiving information from an outside source (see col. 2, lines 58-67, col. 3, lines 1-20), retrieving an indicator from the received information that instructs the system to operate at a higher level of security (see col. 3, lines 39-62, col. 5, lines 25-38).

Grube et al. fails to disclose the reception of a second indicator to proceed to a lower security level and preventing operation at the second level until the reception.

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However, Hannah et al. teaches such a second indicator (see column 6 lines 17-30).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to include Hannah et al.'s second indicator in the system of Grube et al.

Motivation to do so would have been to allow a good compromise between obtaining high throughput while adequately preventing piracy of the information (see Hannah et al. column 6 lines 26-30).

As per claim 2, the modified Grube et al. and Hannah et al. system discloses receiving an encrypted message (see Grube et al. col. 4, lines 7-20).

As per claim 3, the modified Grube et al. and Hannah et al. system discloses wherein said Decreased-security Authorization-Code authorizes a decrease in encryption/decryption level (see Grube et al. col. 3, lines 45-65 and Hannah et al. column 6 lines 17-30).

As per claim 4, the modified Grube et al. and Hannah et al. system discloses wherein said Decreased-security Authorization-Code authorizes a decrease in authentication level (see Grube et al. col. 3, lines 45-65).

As per claim 5, the modified Grube et al. and Hannah et al. system discloses wherein said Decreased-security Authorization-

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Code authorizes a decrease in authentication level and a decrease in encryption/decryption levels (see Grube et al col. 3, lines 45-65 and Hannah et al. column 6 lines 17-30).

As per claim 6, the modified Grube et al. and Hannah et al. system discloses wherein said encrypted message further comprises a key for use in a decryption algorithm (see Grube et al col. 4, lines 7-45).

As per claims 7 and 19, the modified Grube et al. and Hannah et al. system stores a master key (i.e. unique user key) to decrypt messages includes new decryption key values and using said master key stored at said system to decrypt said encrypted message (see Grube et al. col. 3, lines 59-67, col. 4, lines 1-45).

As per claim 8, the modified Grube et al. and Hannah et al. system discloses establishing a Security-Level-status-Indicator at said system to indicate a level of security that is being implemented (see Grube et al. fig. 3, sheet 2).

As per claim 9, the modified Grube et al. and Hannah et al. system discloses said Security-Level-status Indicator indicates a level of encryption/decryption that is being implemented by the system (see Grube et al. fig. 3, sheet 2, col. 3, lines 59-65, col. 5, lines 26-44).

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As per claim 10, the modified Grube et al. and Hannah et al. system discloses said Security-Level-status Indicator indicates a level of authentication that is being implemented by the system (see Grube et al. col. 3, lines 59-67).

As per claim 11, the modified Grube et al. and Hannah et al. system discloses said Security-Level-status Indicator indicates a level of authentication and a level of encryption/decryption that is being implemented by the system (see Grube et al. col. 3, lines 45-65).

As per claim 12, the modified Grube et al. and Hannah et al. system discloses configuring said Security Level Status Indicator to indicate more than two security levels so as to allow said system to utilize more than two security levels (see Hannah et al. column 6 lines 17-30).

As per claim 13, the modified Grube et al. and Hannah et al. system discloses utilizing a cable head-end as said outside source including a set-top box (see Hannah et al. column 1 lines 8-19).

As per claim 14, the modified Grube et al. and Hannah et al. system discloses using a Key Management Message to convey said Decreased Security Authorization Code (see Grube et al. col. 3, lines 45-65 and Hannah et al. column 6 lines 17-30).

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As per claim 15, the modified Grube et al. and Hannah et al. system discloses wherein delivery of said Key Management Message is authenticated (see Grube et al. col. 36-47).

As per claim 16, the modified Grube et al. and Hannah et al. system discloses wherein delivery of said Key Management Message is protected against a replay attack (see Grube et al. col. 7, lines 35-65).

As per claim 17, the modified Grube et al. and Hannah et al. system discloses wherein delivery of said Key Management Message is authenticated and protected against a replay attack (see Grube et al. col. 8, lines 1-30).

As per claim 18, the modified Grube et al. and Hannah et al. system discloses wherein a lower level of security is nonpublic Key mode, wherein a higher level of security is a public Key mode, continuing operation of the system in the public Key mode until an encrypted predefined message is received by the system from the outside source (see Grube et al. col. 3, lines 53-65 and Hannah et al. column 6 lines 17-30).

Response to Arguments

5. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

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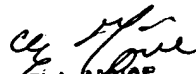
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pyzocha whose telephone number is (571) 272-3875. The examiner can normally be reached on 7:00am - 4:30pm first Fridays of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJP


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